



Forest Management Sheet

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Revised: 11/22/2006

HERBICIDES

Onyx – Insecticide for Bark Beetles

INFORMATION ABOUT ONYX (Active Ingredient: Bifenthrin)

Onyx is an insecticide that can be used to control or eradicate pine beetles. For forestry application, this product is generally used on pines infested with beetles.

The rate is 1.0 to 2.0 pints of Onyx per 100 gallons of water. This rate is equivalent to .25 to .50 pounds of Onyx per 100 gallons of water. The amount of Onyx used in the mixture depends on the time of the year you apply the mixture. Generally, one tree will require 1 to 4 gallons of spray mixture; it just depends on the size of the tree. Make sure you wet thoroughly the area of the trunk that is infested.

Onyx is a preventative method of controlling beetle infestation in trees. If the tree is completely infested with beetles, Onyx may not work to control the infestation. This insecticide is best used on ornamental trees that were just infested or on trees next to others that are infested. Onyx is not recommended for large areas with many infested trees.

Onyx is not absorbed by the tree; the product's target is the beetles. After applying the mixture on the tree and the insecticide has dried, rain (dew or water) will not change its effectiveness. This product is not water soluble so once it has dried, the mixture will not translocate.

Timing is critical when applying Onyx on infested trees. To make sure you have a high success rate, apply Onyx a few weeks before the emergence of the adult beetle. The ideal time is 2 to 4 weeks before the adult beetle emerges from the infested tree. Also, it would be best to accurately identify the type of beetle since each of the 3 main beetles in the south (black turpentine beetle, southern pine beetle and ips engraver beetle) reproduce at different rates per year and each infest a different section of the tree.

All three beetles have an adult, pupa, and larva stage. Their activity generally slows down during the winter months (December through February). The first generation emerges in the spring usually when the azaleas and dogwoods bloom.

Black Turpentine Beetle: The adult is reddish-brown to black and approximately 9 mm long. They infest pine trees from the stump up to 6 feet on the trunk. Their life cycle lasts from 10 to 16 weeks with approximately 2 to 3 generations a year.

Southern Pine Beetle: The adult is reddish-brown to black and approximately 3 mm long. They infest the mid-section of the trunk from 4 feet to the upper section of the trunk. Their life cycle lasts approximately 26 days with 3 to 8 generations a year.

Ips Engraver Beetle: Depending on the species (*avulsus*-small, *grandicollis*-medium, *calligraphus*-large), the adult is reddish-brown to black and approximately 2.5 to 4.5 mm long. They infest pine trees from the lower section to the upper section of the trunk. Their life cycle lasts from 18 to 25 days with 5 to 10 generations a year.

There is one final note because Onyx is extremely toxic to fish and aquatic invertebrates, do not apply directly to water or to areas where surface water is present. Do not conduct an aerial application of this product. Onyx can also be toxic to humans. It is not a restricted-use product, however; it is highly recommended that only individuals with a pesticide applicators license handle Onyx. Make sure you follow all instructions on the label carefully and accurately.

Onyx is still on the market and will be for a while. Here are several locations that sell the product. The sale of Onyx is not limited to these distributors. Onyx is expensive and most places that do sell it do not have a large supply.

Montgomery, AL – 334-260-8037
Homewood, AL – 205-290-0100
Huntsville, AL – 256-881-0084
Mobile, AL – 251-666-5222
Columbus, GA – 706-327-2457

The company that makes the product Onyx:

FMC Corporation
Agricultural Products Group
Philadelphia, PA 19103
Phone #: 1-800-321-1FMC (1362)

This website may also assist you: www.pestsolutions.fmc.com

If you have more specific questions about this product please feel free to contact the local Alabama Forestry Commission office.